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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/066,535      | 01/31/2002  | Kurt E. Spears       | 10012394 -1         | 3672             |

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HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER

LEE, CHEUKFAN

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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2627

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/066,535

Applicant(s)

SPEARS ET AL.

Examiner

Cheukfan Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 2,6-15,17 and 20-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,16,18 and 19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/31/02 & 7/17/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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1. Applicant's election of Species I, Figs. 3A and 3B, without traverse filed October 28, 2005 is acknowledged. Applicant states that the claims readable on Figs. 3A and 3B are claims 1, 3, 4, 5, 16, 18, and 19, and generic claims are 1, 16, and 18.

None elected claims 2, 6, 7-16, 17, and 20-29 are withdrawn from consideration.

Applicant is reminded that a complete response to a final rejection must include cancellation of non-elected claims or other appropriate action (37 CFR 1.144) MPEP § 821.01. This Office Action is non-final.

2. Claims 5 and 19 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for two flexible drive members to which the array (300) is attached to enable moving of the array in two dimensions, does not reasonably provide enablement for one flexible drive member to which the array is attached to enable moving of the array in two dimensions. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims.

Claim 5 recites "a flexible drive member, the array attached to the flexible drive member, and the array moving in a path defined by a flexible drive member." However, the array moving in a path defined by "a" flexible drive member" does not allow the motor to achieve "moving the array in two dimensions..." The specification does not disclose only one but more than one flexible drive member to enable moving the array

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in two dimensions. Please refer to Figs. 3A and 3B and corresponding explanation, which are figures of the elected Species.

Claim 19 is rejected as being a method claim that recites "a flexible drive member" instead of two (or more) flexible drive members for the reason given for claim 5.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 3, 4, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al. (U.S. Patent No. 6,392,761).

Regarding claims 1, 16 and 18, Suzuki et al. discloses an image scanner (scanner 100 used without sheet feed adapter 200) comprising an array of photosensors (100 containing line sensor 80), a motor (306 in Fig. 5) for moving the array (100) in a plane substantially parallel to an image being scanned (col. 5, lines 7-10, col. 6, lines 50-60).

Although in Suzuki et al. the scanner (100) is driven (by motor 306) to move in a one dimension in a direction (designated by arrow F in Figs. 2 and 5) perpendicular to the extending direction of the line image sensor (80), one of ordinary skill in the art

would have realized that by an operator guiding and turning the scanner (100) in a direction perpendicular to the direction (F), the sensor array (80 in 100) is moved by the motor (306) in a second dimension, since Suzuki et al. discloses that by "[s]lightly pushing the scanner 100 against the original and depressing the switch 44, the scanner 100 scans an image on line basis ... and then the rollers 141-148 are driven to rotate to move the scanner", i.e., since slight operator assistance is allowed (col. 5, lines 7-15).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to assist and turn the array (scanner 100) of Suzuki et al., by the operator, in a direction perpendicular to the direction (F) so that the motor moves the array (scanner 100) in a second dimension in order to scan an original of relatively large dimensions.

Regarding claim 3, the motor (306) is a pulse motor, which is considered a rotational motor because the motor rotates to drive the shafts (401, 401) and thus the rollers (141-148) to rotate, thus moving the array (scanner 100) (col. 6, lines 50-60).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chiang (U.S. Patent No. 6,147,780) discloses a scanner which takes samples from different positions of a document to increase its resolution, the scanning module (18), driven by a motor, performing a first scan on the document in the subscanning direction, moved by a switch control device (38) when at the end of the first scan, and

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then performing a second scan on the document in an opposite direction at a different sampling position of the document (col. 3, line 41 – col. 4, line 3).

Nakashima et al. (U.S. Patent No. 6,721,465) discloses a scanner (1) moved in multi-dimensions (Figs. 30(a) and 30(b)).

Gann et al. (U.S. Patent No. 6,965,460) discloses a method and system for scanning an image using a look-down linear array scanner.

Ushio (Japanese Application Publication No. 64-034060 A, same as JP01034060 A cited on Form PTO-892) (with English abstract) discloses a portable image reader having a self-propelling drive device (60) attached to the handy scanner (10) for moving the scanner (10) side to side and forward and forward (Figs. 8s and 11s).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cheukfan Lee whose telephone number is (571) 272-7407. The examiner can normally be reached on 9:30 a.m. to 6:00 p.m., Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (571) 272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cheukfan Lee  
February 1, 2006

  
Cheukfan Lee